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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/584,481	05/31/2000	Marcos N. Novaes	POU9-2000-0014-US1	4790

7590 05/06/2003

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EXAMINER

WON, YOUNG N

ART UNIT	PAPER NUMBER
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2155

DATE MAILED: 05/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/584,481

Applicant(s)

NOVAES ET AL.

Examiner

Young N Won

Art Unit

2155

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 31 May 2000.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7, 10-14, 17-21 and 24 is/are rejected.
- 7) ☒ Claim(s) 8, 9, 15, 16, 22 and 23 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5 & 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. Claims 1-24 have been examined.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-7, 10-14, 17-21 and 24 rejected under 35 U.S.C. 103(a) as being unpatentable over Schmuck et al. (US 5946686 A) in view of Carroll et al. (US 5812853 A).

As per claims 1, 2, and 3, Schmuck teaches a method, a system, and at least one program storage device readable by a machine, tangibly embodying at least one program of instructions executable by the machine to perform a method of, serializing replicated transactions (see col.2, lines 31-36; col.33, lines 34-35; and col.34, lines 62-64) in a distributed computing environment (see abstract), said method comprising: initiating a modification operation on a resource of a distributed computing environment (see col.4, lines 41-43); during a phase of said modification operation, detecting

whether a conflict for said resource exists (see col.33, lines 39-42 and col.36, lines 51-59); and satisfying said conflict, if said conflict exists (see col.38, lines 66-67). Schmuck does not teach that the conflict is satisfied without requiring explicit locking of said resource. Carroll teaches of satisfying conflict without requiring explicit locking of said resource (see col.11, lines 61-65). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to employ the teachings of Carroll within the system of Schmuck by satisfying conflicts without requiring explicit locking of said resources within the method, system and program of serializing replicated transactions because Carroll teaches that a stored tree in a database could be employed for such purpose and Schmuck teaches of a stored tree database (see Schmuck: col.6, lines 27-38 and col.8, Table 1).

As per claims 4, 11, and 18, Schmuck further teaches wherein the modification operation comprises a plurality of phases (see col.29, line 62 to col.30, line 6), and wherein the detecting comprises detecting whether a conflict for the resource exists during a first phase of the modification operation (see col.27, lines 40-51 and col.29, lines 64-66).

As per claims 5, 12, and 19, further teaches wherein the distributed computing environment comprises a processing group with a plurality of members, and wherein the first phase proceeds in parallel with respect to the plurality of members (see col.27, lines 17-40 and see claim 4 rejection above).

As per claims 6, 13, and 20, further teaches wherein the satisfying comprises satisfying the conflict during a second phase of the modification operation (see col.27, lines 40-58; col.29, line 67 to col.30, line 3; and col.).

As per claims 7, 14, and 21, further teaches wherein the distributed computing environment comprises a processing group with a plurality of members, and wherein the second phase proceeds serially with respect to at least some of the plurality of members in order to satisfy the conflict (see claim 6 rejection above and col.33, lines 34-35).

As per claims 10, 17, and 24, further teaches wherein the distributed computing environment comprises a processing group with a plurality of members, and wherein the detecting comprising comparing requests for the resource from at least some of the plurality of members (see col.27, lines 17-40 and see claim 4 rejection above).

***Allowable Subject Matter***

3. Claims 8, 15, and 22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: Prior art of records Schmuck et al. (US 5946686 A) and Carroll et al. (US 5812853 A), do not disclose, teach, or suggest the claim limitation wherein the

Art Unit: 2155

satisfying comprises at least one of the at least some of the plurality of members withholding information in order for the second phase to proceed serially.

4. Claims 9, 16, and 23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: Prior art of records Schmuck et al. (US 5946686 A) and Carroll et al. (US 5812853 A), do not disclose, teach, or suggest the claim limitation wherein the information comprises an acknowledgement.

### ***Conclusion***

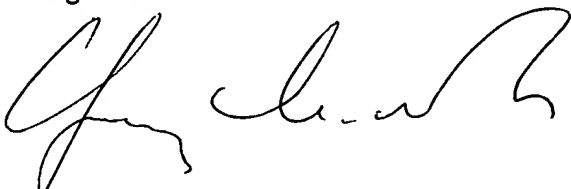
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Young N Won whose telephone number is 703-605-4241. The examiner can normally be reached on M-Th: 8AM-6PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz R Sheikh can be reached on 703-305-9648. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-7239 for regular communications and 703-746-7238 for After Final communications.

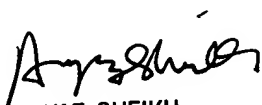
Art Unit: 2155

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Young N Won

A handwritten signature in black ink, appearing to read 'Young N Won', written in a cursive style.

April 29, 2003

A handwritten signature in black ink, appearing to read 'Ayaz Sheikh', written in a cursive style.

AYAZ SHEIKH  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100